5/14/08

R-19J

Mr. David Williams
Environmental Program Manager
Federal Highway Administration
315 West Allegan Street, Room 201
Lansing, Michigan 48933

Re: Comments on the Draft Environmental Impact Statement (DEIS) for the Detroit River International Crossing (DRIC), Wayne County, Michigan, EIS No. 20080067

Dear Mr. Williams:

I am providing comments on the Draft Environmental Impact Statement (DEIS) for the Detroit River International Crossing (DRIC), consistent with our responsibilities under Section 102(2)(c) of the National Environmental Policy Act (NEPA), 42 U.S.C. Section 4332(2)(c), and EPA's authority under Section 309 of the Clean Air Act (CAA), 42 U.S.C. Section 7609.

The purpose of the DRIC is to provide safe, efficient and secure movement of people and goods across the U.S-Canadian border in the Detroit River area to support the economies of Michigan, Ontario, Canada and the United States, and to support the mobility needs of national and civil defense. The DEIS describes four needs:

(1) Provide new border-crossing capacity to meet increased long-term demand;
(2) Improve system connectivity to enhance the seamless flow of people and goods;
(3) Improve operations and processing capability in accommodating the flow of people and goods;
(4) Provide reasonable and secure crossing options in the event of incidents, maintenance, congestion, or other disruptions.

Nine practical Build Alternatives and one No Action Alternative have been evaluated in the DEIS. Each of the build alternatives consists of three elements: (1) an interchange connecting the plaza to the existing highway network, (2) a Customs and Immigration inspection plaza, and (3) a bridge from the plaza that spans the Detroit River into Canada. The Federal Highway Administration (FHWA) and Michigan Department of Transportation (MDOT) have not identified a preferred alternative.

The United States Environmental Protection Agency - Region 5 (EPA) has agreed to work with FHWA and MDOT on this project as a cooperating agency. As such, we have reviewed the

project's purpose and need, the range of alternatives, and methodologies used to evaluate environmental impacts. We previously provided concurrence with these points in July 2007. Through this letter, we are providing our concurrence with the fourth point: results of key environmental studies. We offer our comments below because we believe that FHWA and MDOT can make several important adjustments to the project and its FEIS related to air quality. The comments that we have on air quality are provided in the attached detailed comments. Our detailed comments also discuss opportunities for this project to incorporate energy efficiency in design and operation.

Based on our review of the information provided in the DEIS and the detailed comments we have enclosed on air quality, we have rated the DEIS as "Environmental Concerns-Insufficient Information" (EC-2). The "EC" means that EPA identified environmental impacts that can be reduced in order to attain the fine particulate (PM2.5) National Ambient Air Quality Standard and provide adequate protection for public health. The "2" indicates that additional information needs to be provided in the Final Environmental Impact Statement (FEIS) to alleviate these public health issues. Our rating applies to each of the build alternatives presented in the DEIS. We have enclosed a summary of EPA's rating system under NEPA.

Thank you for the opportunity to comment on this DEIS. We are available to discuss these comments. We are confident that these issues will be addressed and reflected in the forthcoming FEIS. If you have any questions, please contact me. The staff person assigned to this project is Sherry Kamke; she can be reached at (312) 353-5794 or via email at kamke.sherry@epa.gov.

Sincerely,

/s/

Bharat Mathur
Acting Regional Administrator

Enclosures (3)

1) Detailed Comments
2) EPA's Summary of NEPA Rating Definitions and Followup Actions
3) DRIC concurrence page for DEIS Technical Reports

cc: Robert Parsons, Michigan Department of Transportation
David Wresinski, Michigan Department of Transportation

Detailed Comments on the Draft Environmental Impact Statement (DEIS) for the Detroit River International Crossing (DRIC)

Air Quality in Detroit

EPA is concerned about major infrastructure projects in the Detroit Metropolitan area because of their potential to adversely impact ambient air quality. EPA has designated Southeast Michigan as a non-attainment area for the fine particulate standard, referred to here as particulate matter 2.5 microns or less (PM2.5). Because of their impact on human health, EPA has emphasized the need to address PM2.5 and diesel emissions through various national, regional, and local initiatives. Work is currently underway to develop and implement control programs that will assist in bringing this area into attainment of the health-based PM2.5 standard as expeditiously as practicable. Despite implementation of national air pollution control programs, additional local controls will likely be necessary for this area to reach attainment of the National Ambient Air Quality Standard (NAAQS) for PM2.5. Any increase in the emissions in this area is cause for concern and will make the state's task of developing a control strategy for bringing the area into attainment more challenging.

Particulate Matter (PM)

The DRIC raises air quality concerns because large numbers of diesel trucks are associated with the project. The proposed DRIC project must be added to the long-range Regional Transportation Plan to determine if the DRIC will conform to the State Implementation Plan. This transportation conformity test will occur after the Preferred Alternative is identified and will be reported on in the FEIS.

In addition to the regional conformity test, FHWA and MDOT are required to prepare qualitative hot-spot analyses for PM2.5 and PM10 for the DRIC alternatives. This is because the project qualifies as a new or expanded project that has a significant number of or significant increase in diesel vehicles (See 40 CFR 93.123 (b)(1)). A microscale or "hot-spot" analysis is designed to evaluate whether there are air quality impacts on a local scale rather than an entire nonattainment or maintenance area. Transportation projects subject to the conformity requirement must not cause new air quality violations, worsen existing violations, or delay attainment of the air quality standards. See Clean Air Act § 176(c) and EPA's implementing regulations at 40 CFR Part 93. The transportation conformity rule requires that projects of air quality concern be assessed qualitatively for local PM impacts.

The required analyses were included in MDOT's technical report entitled "Air Quality Impact Analysis." Since no preferred alternative has been identified as part of the DEIS, MDOT's hot-spot analysis treats all the existing alternatives equally. The analysis should be based on the vehicle activity at the location being analyzed. The DEIS included a discussion about the

increase in traffic during the time frame of the project, but there was limited discussion of the secondary impacts of the project. There should be a more focused discussion about how the project will actually affect traffic levels in specific locations. In addition, there have been numerous air quality studies on particulate matter in Southwest Detroit, Dearborn, and near the bridge corridor in Windsor, Ontario, which the FEIS should summarize. We cannot treat these analyses as complete because the DEIS did not pick a preferred alternative for the DRIC project. At the FEIS stage, a preferred alternative will be selected. At that time, we expect MDOT will be able to focus on that alternative and provide a clearer hot-spot analysis.

Ozone

EPA revised the 8-hour ozone standard on March 12, 2008. EPA expects to make final designations for the new standard in March 2010. New State air quality plans will be required in 2013. The Michigan Department of Environmental Quality will have to include air emissions related to the DRIC projects in the associated state implementation plans.

Mobile Source Air Toxics

The Mobile Source Air Toxics (MSAT) analysis in the DEIS is based on FHWA's "Interim Guidance on Air Toxics Analysis in NEPA Documents." While there are positive elements to this guidance, especially the willingness to acknowledge potential MSAT concerns, EPA continues to believe this guidance is not consistent with current academic literature and other published guidance. As an example, we point to the recent extensive report to the American Association of State Highway and Transportation Officials conducted as part of a National Cooperative Highway Research Program project: "Analyzing, Documenting, and Communicating the Impacts of Mobile Source Air Toxic Emissions in the NEPA Process," March 2007, http://www.trb.org/NotesDocs/25-25(18)_FR.pdf. This document, commissioned by the States' Departments of Transportation, represents current professional practices of air quality experts and identifies air quality tools and approaches that would be appropriate for various NEPA settings and project levels. Although the DEIS conforms to FHWA's Interim Guidance, we continue to believe more could be done to quantify local air impacts, especially where higher concentrations of diesel emissions are expected.

The DEIS provides toxicity information for six MSATs of most concern. EPA agrees with the need to provide this information in the DEIS, but notes that the primary health concern for acrolein is not cancer, but rather respiratory. Similarly, benzene, acetaldehyde, formaldehyde, and 1,3-butadiene all have non-cancer health endpoints of potential concern. We recommend including health endpoints other than cancer for acrolein, benzene, acetaldehyde, formaldehyde, and 1,3-butadiene in the description of toxicological endpoints included in the DEIS. Cancer is not a known health endpoint for acrolein. Therefore, references to potential carcinogenicity for acrolein should be removed (pg 3-87 of the DEIS and pg 4-4 of the DEIS Technical Report).

In addition to those MSATs explicitly discussed in FHWA's interim guidance, both the guidance and DRIC DEIS acknowledge numerous studies providing evidence that populations living near major roadways face adverse health outcomes. Language in both documents notes that FHWA

cannot assess the validity of these studies. However, numerous publications, including those of EPA and the Centers for Disease Control and Prevention (CDC), have reviewed available public health studies of current populations exposed to current levels of traffic-related air pollution. The available reviews conclude that there is consistent evidence across a range of different studies for several health endpoints, including respiratory effects (lung developmental decrements, exacerbation of respiratory symptoms in asthmatics and non-asthmatics, and onset of asthma and allergic disease), cardiovascular disease and mortality, and all-cause mortality in adults (Adar and Kaufman, 2007; Salam et al., 2008; Samet, 2007). In 2004, these studies prompted the American Academy of Pediatrics (AAP), the licensing board for pediatricians, to advise that schools and child care centers be sited away from roads with heavy traffic. Given the proximity of the proposed project to Detroit Public Schools facilities and an early childhood center, these studies and their interpretation by the AAP should be given greater prominence in the FEIS. The studies establish a presumptive public health problem with populations near major transportation infrastructure, and as such, the Environmental Impact Statement should include analysis of a broader range of mitigation options. EPA can provide technical advice and assessments of available mitigation options.

As the FHWA guidance acknowledges, these studies are not specific to MSATs. As such, these studies should be treated separately from MSATs. Available information suggests that a portion of the observed health decrements in populations living near major roads may be attributable to mechanically-generated particles from brake and tire wear, ultrafine particles, or other pollutants not herein defined as MSATs. As an indicator of concern over non-tailpipe and non-evaporative pollutants for the current DEIS, a 2004 study of residents near the Peace Bridge border crossing near Buffalo, New York estimated that in the community around the bridge, hospital discharges for adult asthma increased between 1991 and 1996, while the national hospitalization rate fell (Lwebuga-Mukasa et al., 2004). Given the sharp reductions in motor vehicle emissions that occurred during that time frame, the study highlights concerns that MSAT and other tailpipe and evaporative emission trends are insufficient to explain likely health impacts of the current project.

Mitigation for Air Quality Impacts

Construction - Construction emissions may represent a substantial source of PM2.5 emissions in areas that currently have serious air pollution problems, for which it will be challenging to meet the PM2.5 Standard. We recommend that MDOT and FHWA do all that can be done to minimize PM2.5 emissions from the project, including construction activities.

For this project, construction emissions could be a major component of air emissions. We acknowledge the Air Quality Mitigation information that MDOT included in their Green Sheet Project Mitigation Summary, which is part of the DEIS. We note that the air quality measure is for a construction emissions plan that will include actions such as:

- Retrofitting off-road construction equipment,
- Using ultra-low sulfur fuels for equipment,

- Limiting the age of off-road vehicles used in construction,
- Minimizing engine operations,
- Restricting construction activities around more sensitive receptors,
- Instituting fugitive dust control plans, and
- Using diesel particulate traps and oxidation catalysts.

We recommend that FHWA and MDOT undertake an analysis of construction mitigation options and commit to them to the extent possible.

Operational - General mitigation approaches for anti-idling during operations are only briefly touched upon in the DEIS. We recommend that FHWA and MDOT consider the following measures:

- Routing to reduce truck traffic through residential areas and away from more sensitive receptors,
- Minimizing travel within plazas,
- Implementation of border delay reductions, and
- Implementation of anti-idling strategies at inspection queues.

Research published by EPA investigators suggests that high sound barriers and mature roadside vegetation between people and traffic may significantly reduce downwind concentrations of pollutants emitted along roadways.

We recommend that FHWA and MDOT undertake an analysis of mitigation options for both construction and operations and commit to them to the extent possible, so that an alternative with low environmental impact, both for the region and local communities, can be selected. We are available to participate in discussions on addressing mitigation.

Stormwater

Information included in the DEIS on sedimentation control measures and stormwater management plans sufficiently addresses EPA's scoping comments on stormwater.

Energy Efficiency and Sustainability

Plaza buildings should be designed and operated to minimize energy use and incorporate sustainable architecture where feasible. We recommend the project sponsors evaluate and incorporate such features as green roofs, low-flow plumbing fixtures, permeable pavements, and high-efficiency lighting. Lighting on the bridge and highway links should also be high efficiency. The General Service Administration (GSA) will own the plaza buildings. Under GSA policies, all GSA new construction projects and substantial renovations must be certified through the Leadership in Energy and Environmental Design (LEED) Green Building Rating System of the

U.S. Green Building Council. Projects are encouraged to exceed basic LEED green building certification and achieve the LEED Silver level. Please document in the FEIS how DRIC will implement this GSA policy.

SUMMARY OF RATING DEFINITIONS AND FOLLOW UP ACTION*

Environmental Impact of the Action

LO-Lack of Objections
The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC-Environmental Concerns
The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impacts. EPA would like to work with the lead agency to reduce these impacts.

EO-Environmental Objections
The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU-Environmentally Unsatisfactory
The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potential unsatisfactory impacts are not corrected at the final EIS sate, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1-Adequate
The EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alterative and those of the alternatives reasonably available to the project or action. No further analysis or data collecting is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2-Insufficient Information
The draft EIS does not contain sufficient information for the EPA to fully assess the environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3-Inadequate
EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640 Policy and Procedures for the Review of the Federal Actions Impacting the Environment